

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method of binder extraction and sintering of a green body in a state of weightlessness, comprising:
 - a. providing a green body composed of at least one sinterable particulate material and an organic binder soluble in supercritical fluids
 - b. placing said green body on a weighing device capable of operating in the environment of a hot isostatic press system and displaying the weight of said green body externally to said hot isostatic press system
 - c. loading said weighing device and said green body into the chamber of said hot isostatic press and filling said chamber with a fluid medium which, above its critical point, is a solvent for the organic binder of said green body
 - d. pressurizing said fluid medium until said external green body weight indication is substantially nil
 - e. raising the temperature in the chamber of said hot isostatic press system until binder extraction and sintering of the green body are substantially completed whilst maintaining said fluid medium at a pressure such that said green body weight indication remains substantially nil.
2. (Original) The method of claim 1 wherein said fluid medium is constituted by a plurality of supercritical fluids
3. (Original) The method of claim 1 wherein said fluid medium is carbon dioxide
4. (Original) The method of claim 1 wherein said fluid medium is xenon
5. (Original) The method of claim 1 wherein said fluid medium is constituted by a mixture of carbon dioxide and xenon
6. (Original) The method of claim 1 wherein the composition of said fluid medium is changed during binder removal and sintering of said green body

7. (Original) The method of claim 1 wherein said green body has a convoluted geometry
8. (Currently Amended) A method of binder extraction and sintering of a green body in a state of weightlessness, comprising:
- providing a green body composed of at least one sinterable particulate material and an organic binder soluble in supercritical fluids
 - loading said green body in the chamber of a hot isostatic press system and filling said chamber with a fluid medium which, above its critical point, is a solvent for the organic binder of said green body
 - raising the temperature in the chamber of said hot isostatic press system until binder extraction and sintering of the green body are substantially completed whilst **maintaining simultaneously continuously adjusting the pressure of** said fluid medium **at a pressure throughout the binder extraction and sintering process** such that ~~its~~ **the density of said fluid medium is remains** substantially equal to that of said green body being processed.
9. (Original) The method of claim 8 wherein said fluid medium is constituted by a plurality of supercritical fluids
10. (Original) The method of claim 8 wherein said fluid medium is carbon dioxide
11. (Original) The method of claim 8 wherein said fluid medium is xenon
12. (Original) The method of claim 8 wherein said fluid medium is constituted by a mixture of carbon dioxide and xenon
13. (Original) The method of claim 8 wherein the composition of said fluid medium is changed during binder removal and sintering of said green body
14. (Original) The method of claim 8 wherein said green body has a convoluted geometry